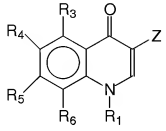
Listing of Claims

1. (Original) A compound of the following formula (I), or a tautomer or pharmaceutically acceptable salt thereof:



wherein R_1 is selected from -H, -C_{1-6} alkyl, or -C_{1-6} alkyl substituted with R_7;

Z is selected from -C(O)OR_2 or -C(O)CH_2C(O)X;

X is selected from:

(a) -a 5 or 6-membered aromatic or heteroaromatic ring, containing 0, 1 ,2, 3 or 4 heteroatoms selected from oxygen, nitrogen and sulfur, unsubstituted or independently substituted on a nitrogen or carbon atom by at least one substituent selected from halogen, C_{1-6} alkyl, or phenyl, or

(b) -C(O)OR_2;

R_2 is selected from -H or -C_{1-6} alkyl;

R_3, R_4, R_5 and R_6 are each independently selected from -H, -halogen, -C_{1-6} alkyloxy-, -N(R_8)(R_9), -C(O)CH_3, -C(O)CH_2C(O)X, -S(O)$_n$-R_{10} wherein n is independently selected from 0, 1 and 2, heteroalkyl, cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;

R_7 independently selected from heteroalkyl, cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;

each R_8 and R_9 is independently selected from -H or -C_{1-2} alkyl; and

each R_{10} is independently selected from -C_{1-6} alkyl, pyridyl, or phenyl, wherein the phenyl is unsubstituted or substituted on a carbon atom by least one substituent selected from halogen, -CH_3, -OR_2, or -NO_2;

provided that if Z is -$C(O)OR_2$ then at least one of R_3, R_4, R_5 or R_6 is -$C(O)CH_2C(O)X$.

2. (Original) The compound of claim 1, wherein Z is -$C(O)CH_2C(O)X$ and R_3, R_4, R_5 and R_6 are not -$C(O)CH_2C(O)X$.

3. (Original) The compound of claim 2, wherein X is -$C(O)OR_2$.

4. (Original) The compound of claim 3, wherein R_2 is -H or ethyl; R_3 and R_6 are each -H; R_4 and R_5 are each independently -H or -halo; and R_1 is 4-fluorophenylmethyl.

5. (Original) The compound of claim 3, wherein R_2 is -H or alkyl; and R_1 is 4-fluorophenylmethyl.

6. (Original) The compound of claim 1, wherein R_7 is independently selected from pyridyl, thienyl, naphthyl or phenyl, wherein the phenyl is unsubstituted or independently substituted on a carbon atom by at least one substituent selected from halogen, -CH_3, -OR_2, or -NO_2.

7. (Original) The compound of claim 1, wherein Z is -$C(O)CH_2C(O)C(O)OR_2$ and R_1 is -C_{1-6} alkyl, or -C_{1-6} alkyl substituted with R_7.

8. (Original) The compound of claim 4, wherein R_2, R_4 and R_5 are each -H.

9. (Original) The compound of claim 4, wherein R_2 is -H and R_4 and R_5 are each -H or -Cl wherein at least one of R_4 or R_5 is -Cl.

10. (Original) The compound of claim 7, wherein R_1 is a halogen-substituted arylalkyl.

11. (Original) The compound of claim 1, wherein Z is -C(O)OR_2 and at least one of R_3, R_4, R_5 or R_6 is -C(O)CH_2C(O)X.

12. (Original) The compound of claim 11, wherein R_4 is -C(O)CH_2C(O)X.

13. (Original) The compound of claim 12, wherein R_1 is a halogen-substituted arylalkyl.

14. (Original) The compound of claim 13, wherein R_4 is -C(O)CH_2C(O)C(O)OR_2, R_2 is -H or ethyl, and R_1 is 4-fluorophenylmethyl.

15. (Original) The compound of claim 1, wherein at least one of R_3, R_4, R_5 and R_6 is a 5 or 6-membered heteroalicyclic ring containing 1 or 2 nitrogen heteroatoms.

16. (Original) A pharmaceutical composition comprising the formula (I) compound of claim 1, and a pharmaceutically acceptable carrier.

17. (Original) A pharmaceutical composition comprising the formula (I) compound of claim 4, and a pharmaceutically acceptable carrier.

18. (Original) A pharmaceutical composition comprising the formula (I) compound of claim 11, and a pharmaceutically acceptable carrier.

19. (Currently amended) A method of treating ~~or preventing AIDS or~~ HIV infection in a subject, the method comprising administering to the subject a therapeutically effective amount of at least one formula (I) compound of claim 1.

20. (Canceled)

21. (Currently amended) The method of claim 19, wherein the method of treatment helps to ~~prevent or~~ delay ~~the onset~~progression of infection by HIV.

22. (Original) The method of claim 19, comprising orally administering the formula (I) compound.

23. (Original) The method of claim 19, comprising parenterally, sublingually, intranasally, intrathecally, topically, opthalmically or rectally administering the formula (I) compound.

24. (Original) The method of claim 19, wherein the formula (I) compound comprises a compound wherein Z is $-C(O)CH_2C(O)X$ and R_3, R_4, R_5 and R_6 are not $-C(O)CH_2C(O)X$.

25. (Original) The method of claim 24, wherein the formula (I) compound comprises a compound wherein X is $-C(O)OR_2$.

26. (Original) The method of claim 25, wherein the formula (I) compound comprises a compound wherein R_2 is -H or ethyl; R_3 and R_6 are each -H; R_4 and R_5 are each independently -H or -halo; and R_1 is 4-fluorophenylmethyl.

27. (Original) The method of claim 19 wherein the formula (I) compound comprises a compound wherein Z is $-C(O)OR_2$ and at least one of R_3, R_4, R_5 or R_6 is $-C(O)CH_2C(O)X$.

28. (Original) The method of claim 27 wherein the formula (I) compound comprises a compound wherein R_4 is $-C(O)CH_2C(O)C(O)OR_2$, R_2 is -H or ethyl, and R_1 is 4-fluorophenylmethyl.

29-30. (Canceled)

31. (Original) A method of inhibiting a retroviral integrase, the method comprising exposing the HIV integrase to an integrase inhibiting amount of at least one formula (I) compound of claim 1.

32. (Original) The method of claim 31, wherein the formula (I) compound comprises a compound wherein Z is $-C(O)CH_2C(O)X$ and R_3, R_4, R_5 and R_6 are not $-C(O)CH_2C(O)X$.

33. (Original) The method of claim 32, wherein the formula (I) compound comprises a compound wherein X is $-C(O)OR_2$.

34. (Original) The method of claim 33, wherein the formula (I) compound comprises a compound wherein R_2 is -H or ethyl; R_3 and R_6 are each -H; R_4 and R_5 are independently -H or -halo; and R_1 is 4-fluorophenylmethyl.

35. (Original) The method of claim 31 wherein the formula (I) compound comprises a compound wherein Z is $-C(O)OR_2$ and at least one of R_3, R_4, R_5 and R_6 is $-C(O)CH_2C(O)X$.

36. (Original) The method of claim 35 wherein the formula (I) compound comprises a compound wherein R_4 is $-C(O)CH_2C(O)C(O)OR_2$, R_2 is -H or ethyl, and R_1 is 4-fluorophenylmethyl.

37. (Original) The method of claim 31, comprising inhibiting a HIV integrase.

38. (Original) The method of claim 31, comprising inhibiting strand transfer catalyzed by HIV integrase.

39. (Original) The method of claim 31, comprising inhibiting incorporation of a donor strand DNA into a receiving strand DNA.

40. (Canceled)

41. (Currently amended) A method of treating ~~or preventing AIDS or~~ HIV infection in a subject, the method comprising administering to the subject a therapeutically effective amount of a pharmaceutical composition of claim 16.

42. (Currently amended) A method of treating ~~or preventing AIDS or~~ HIV infection in a subject, the method comprising administering to the subject a therapeutically effective amount of a pharmaceutical composition of claim 17.

43. (Currently amended) A method of treating ~~or preventing AIDS or~~ HIV infection in a subject, the method comprising administering to the subject a therapeutically effective amount of a pharmaceutical composition of claim 18.

44. (Previously presented) The compound of claim 1, wherein Z is -$C(O)CH_2C(O)C(O)OR_2$; R_2 is –H or $–CH_2CH_3$; R_3, R_4 and R_6 are each –H; R_5 is 1-pyrrolidinyl; and R_1 is 4-fluorophenylmethyl.

45. (Previously presented) The compound of claim 1, wherein Z is -$C(O)CH_2C(O)C(O)OR_2$; R_2 is –H or $–CH_2CH_3$; R_3 and R_6 are each –H; R_4 is –H or –halo; and R_5 is –H, -halo, or a 5 or 6-membered heteroalicyclic ring containing 1 or 2 nitrogen heteroatoms.

46. (Previously presented) A pharmaceutical composition comprising the formula (I) compound of claim 44, and a pharmaceutically acceptable carrier.